

REMARKS

Claims 1, 3-23 and 25 are pending in this application. By this Amendment, the specification and claims 1, 3, 9, 13, 17-19, 21-23 and 25 are amended and claims 2 and 24 are canceled without prejudice or disclaimer. Various amendments are made to the claims for clarity and are unrelated to issues of patentability.

The Office Action objects to the drawings because Figure 1 does not show pilot beacon 1 and pilot beacon 2 referenced in the specification at page 4, lines 7-14. By this Amendment, the specification is amended at paragraph [9] so as to remove the numerical elements 1 and 2. Withdrawal of the objection to the drawings is respectfully requested.

The Office Action appears to reject the application under 35 U.S.C. §112, first paragraph. Applicant respectfully submits that 35 U.S.C. §112, first paragraph, applies to the claims (with reference to the specification based on the claims). However, the Office Action does not reference any claims. However, in order to further prosecution, paragraph [8] of the specification is amended so as to make more clear, concise and/or exact the described terms (regardless of the claims). The language provided in the amended sections corresponds with language in paragraph [9]. Thus, no new matter is added. Furthermore, the claims are adequately described in the specification. Withdrawal of the rejection is respectfully requested.

The Office Action objects to claims 1, 13, 17, 21, 23 and 25 because of informalities. The above amendments obviate the grounds for objection. Further, claim 13 is amended to

refer to the inter-sector hard handoff (rather than the second handoff as suggested in the Office Action). Withdrawal of the objection is respectfully requested.

The Office Action rejects claim 17 under 35 U.S.C. §112, second paragraph. The phrase including “regardless” has been deleted. Withdrawal of the rejection is respectfully requested.

Applicant gratefully acknowledges the Office Action’s indication that claim 25 contains allowable subject matter.

The Office Action rejects claims 1-24 under 35 U.S.C. §103(a) over U.S. Patent 6,768,908 to Jalloul (hereinafter “Jalloul”) in view of U.S. Patent 6,038,448 to Chheda et al. (hereinafter “Chheda”). The rejection is respectfully traversed.

Independent claim 1 recites performing a first handoff, performing an inter-sector hard handoff and performing a second handoff. Independent claim 1 further recites performing an inter-sector hard handoff from the first sector of the gateway base station to a second sector of the gateway base station when a pilot signal strength of the first base station meets a drop threshold value. The feature of inter-sector handoff being a hard handoff was previously recited in dependent claim 2.

The applied references do not teach or suggest these features of independent claim 1. In particular, the Office Action admits that Jalloul does not explicitly teach various claimed features. The Office Action states that Jalloul does not teach the mobile station initially communicating with a first cell, moving to a second cell through a gateway cell. The Office Action then relies on Chheda for numerous features regarding the handoff between cells and/or

sectors. In particular, the Office Action primarily relies on Chheda for showing performing a handoff when a mobile station moves from a first cell to a first sector of a second cell, to a second sector of the second cell and finally to a third cell. The Office Action asserts that Chheda relates to performing an inter-sector handoff from the first sector of the second cell to the second sector of the second cell when a pilot signal strength of a first base station meets a drop threshold value. However, as is expressly described in Chheda, in moving from position 624 to position 626, the mobile unit moves from sector 616B to sector 616C and such a move is considered a softer handoff within the cell 616. See Chheda's col. 11, line 67-col. 12, line 3. Thus, any inter-sector handoff in Chheda is a softer handoff.

Independent claim 1 explicitly refers to an inter-sector hard handoff. Chheda's softer handoff clearly is not a hard handoff. The Office Action agrees that Jalloul and Chheda teach that the inter-sector handoff is a soft handoff. Applicant respectfully notes that Chheda's handoff is a "softer handoff," which is different than a "soft handoff" as would be known to one skilled in the art. See also paragraphs [4]-[6] of the present specification. Jalloul does not teach or suggest any features that would suggest changing Chheda so as to include a hard handoff. In fact any such change would be contradictory to Chheda's teaching. The Office Action appears to state that Jalloul does not teach that some of the sectors are of a first frequency and other sectors are of a second frequency. See page 5, lines 8-18 of the Office Action. However, the Office Action then states that it would have been apparent to one skilled

in the art to make sector allocations such that the different sectors are of different types. However, this directly contradicts the teaching in Chheda and therefore is not proper.

The applied references as a whole, and when combined as alleged in the Office Action, clearly do not relate to an inter-sector hard handoff as recited in independent claim 1. On page 5, lines 10-11, the Office Action states that Jalloul and Chheda teach that the inter-sector handoff is a soft handoff. Then on lines 19-20 (of page 5) the Office Action states that it would have been obvious to incorporate a hard handoff for inter-sector handoff. Applicant respectfully submits that the Office Action has failed to make a *prima facie* case of obviousness since the Office Action does not provide any references showing this specifically claimed feature and that the Office Action does not provide any proper motivation for such combination even if the missing element(s) were disclosed. Accordingly, independent claim 1 defines patentable subject matter.

Each of independent claims 11, 17 and 21 define patentable subject matter for at least similar reasons. That is, independent claim 11 recites performing an inter-sector hard handoff from the α sector of cell 'G' to the β sector of cell 'G' if a signal of cell 'A' meets a drop threshold value. Furthermore, independent claim 17 recites a gateway station in an overlap region of the first and second communication system having a first sector inclusive of a frequency group of the first mobile communication system and a second sector inclusive of a frequency group of the second mobile communication system, the gateway station to control and manage a hard handoff between the first mobile communication system and the second

mobile communication system. Furthermore, independent claim 21 recites that the gateway base station performs an inter-frequency hard handoff of the call between the first and second sectors of the gateway base station from the first frequency to the second frequency. For at least the reasons set forth above, the applied references do not teach or suggest all the features of independent claims 11, 17 and 21. Thus each of independent claims 11, 17 and 21 define patentable subject matter at least for these reasons.

Each of the dependent claims depends from one of the independent claims and therefore defines patentable subject matter at least for this reason. In addition, each of the dependent claims recites features that further and independently distinguish over the applied references.

For example, the Office Action makes references to claims 4 and 9 and to assertions that are not shown in the prior art. That is, for at least similar reasons as set forth above with respect to independent claim 1, the applied references also do not teach or suggest the features of each of dependent claims 4 and 9. That is, dependent claim 4 recites that the first base station and the first sector of the gateway base station operate at a first frequency, wherein the second sector of the gateway base station and the second base station operate at a second frequency, and wherein the first and second sectors of the gateway base station comprise an overlap area of the first and second base stations. Furthermore, dependent claim 9 recites performing the inter-sector hard handoff comprises switching from the first sector of the gateway base station to the second sector of the gateway base station and changing a frequency from a frequency of the first sector and the first base station to a frequency of the second sector and the second base station after

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performing the first handoff. Applicant respectfully submits that the applied references do not suggest these features. Thus, dependent claims 4 and 9 (as well as claims 13 and 23) define patentable subject matter at least for these additional reasons.

CONCLUSION

In view of the foregoing, it is respectfully submitted that the application is in condition for allowance. Favorable consideration and prompt allowance of claims 1, 3-23 and 25 are earnestly solicited. If the Examiner believes that any additional changes would place the application in better condition for allowance, the Examiner is invited to contact the undersigned attorney, **David C. Oren**, at the telephone number listed below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this, concurrent and future replies, including extension of time fees, to Deposit Account 16-0607 and please credit any excess fees to such deposit account.

Respectfully submitted,
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